AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-41 (Cancelled).

42. (Previously Presented) A method of detecting a cell type of interest present or potentially present in a sample comprising treating the sample, *in vitro or ex vivo*, with lipid vesicle particles which specifically bind to said cell type of interest, said particles having at least one layer of enveloping lipids and incorporating a cytolytic peptide, which is non-covalently attached thereto, wherein said peptide, in response to a predetermined extracellular metabolic signal from said cell type of interest, if present in the sample, interacts with the layer to act as or mediate the opening of pores or channels within the lipid layer to thereby modulate the permeability of the particles, said particles further incorporating a species which is released on said modulation of permeability, wherein said species produces a detectable signal in the presence of said metabolic signal, and monitoring directly or indirectly for the species,

wherein a portion of said particles have a first binding moiety and a further portion of said particles have a second binding moiety which is capable of binding with said first binding moiety whereby said particles are, or are capable of being, aggregated together, and

wherein said sample is treated with said particles under conditions such that a collection of said particles is aggregated around said cell type of interest.

43. (Currently Amended) The method according to claim [[42]] 69, wherein the cytolytic peptide comprises an integral protein of the lipid layer.

44. (Currently Amended) The method according to claim [[42]] 69, wherein the cytolytic peptide spans the lipid layer.

45. (Previously Presented) The method according to claim 69, wherein the cytolytic peptide is non-covalently attached to an outer lipid layer.

46. (Previously Presented) The method according to claim 69, wherein the particles comprise a binding agent capable of binding a particle to the cell type of interest when the particle is targeted thereto.

47. (Previously Presented) The method according to claim 46, wherein the binding agent is an antibody for binding to an antigen on the cell type of interest.

48.-49. (Cancelled).

50. (Previously Presented) The method according to claim 42 , wherein the first binding moiety is avidin or a derivative thereof, and the second binding moiety is biotin or a derivative thereof.

51. (Previously Presented) The method according to claim 69, wherein the cytolytic peptide is selected from the group consisting of GALA, Helical erythrocyte lysing peptide (HELP), KALA, and LAGA.

52. (Previously Presented) The method according to claim 69, wherein the cytolytic peptide is N, Myristic-GALA.

53. (Currently Amended) The method according to claim [[42]] 69, wherein the cytolytic peptide is selected from the group consisting of Amphotericin B, Alamethicin, Gramicidin, Melittin, Nigericin, P25, Polymixin B, Valinomycin, and Vibriolsin.

54. (Previously Presented) The method according to claim 69, wherein the species is a dye.

55. (Previously Presented) The method according to claim 69, wherein the species is an enzyme.

56. (Previously Presented) The method according to claim 55, wherein the enzyme is alkaline phosphatase, β-Galactosidase or asparaginase, or glucose oxidase.

57. (Previously Presented) The method according to claim 69, wherein the species is a co-factor or substrate for an enzyme.

58. (Previously Presented) The method according to claim 42, wherein said cell type of interest is pathogenic cells.

59. (Previously Presented) The method according to claim 58, wherein said method is a method for analysing foodstuff for the presence of said pathogenic cells.

60. (Previously Presented) The method according to claim 58, wherein said method is a method for analysing water samples for the presence of said pathogenic cells.

61. (Cancelled).

62. (Currently Amended) The method according to claim [[42]] 69, wherein the metabolic signal comprises a change in ion concentration.

63. (Previously Presented) The method according to claim 62, wherein the ion is H^+, Na^+, Cl^-, HCO^-, or K^+.

64. (Presented Previously) A method of detecting a cell type of interest present or potentially present in a sample comprising treating the sample, *in vitro* or *ex vivo*, with lipid vesicle particles which specifically bind to said cell type of interest, said particles having at least one layer of enveloping lipids and incorporating a cytolytic peptide, which is non-covalently attached thereto, wherein said peptide, in response to a predetermined metabolic signal, which

metabolic signal comprises a change in pH, from said cell type of interest, if present in the sample, interacts with the layer to act as or mediate the opening of pores or channels within the lipid layer to thereby modulate the permeability of the particles, said particles further incorporating a species which is released on said modulation of permeability, wherein said species produces a detectable signal in the presence of said metabolic signal, and monitoring directly or indirectly for the species,

wherein a portion of said particles have a first binding moiety and a further portion of said particles have a second binding moiety which is capable of binding with said first binding moiety whereby said particles are, or are capable of being, aggregated together, and

wherein said sample is treated with said particles under conditions such that a collection of said particles is aggregated around said cell type of interest.

65. (Previously Presented) The method according to claim 70, wherein the metabolic signal comprises a change in pH, wherein the pH is above 6.

66. (Previously Presented) The method according to claim 70, wherein the metabolic signal comprises a change in pH, wherein the pH is above 7.

67. (Currently Amended) The method according to claim [[42]] 69, wherein the metabolic signal comprises a change in gas concentration.

68. (Currently Amended) The method according to claim [[42]] 69, wherein the metabolic signal comprises a change in carbon dioxide concentration.

69. (Previously Presented) A method of detecting a cell type of interest present or potentially present in a sample comprising treating the sample, *in vitro* or *ex vivo*, with lipid vesicle particles which specifically bind to said cell type of interest, said particles having at least one layer of enveloping lipids and incorporating a cytolytic peptide, which is non-covalently attached thereto, wherein the peptide, in response to a predetermined extracellular metabolic signal from the cell type of interest, if present in the sample, interacts with the layer to act as or mediate the opening of pores or channels within the lipid layer to thereby modulate the permeability of the particles, said particles further incorporating a species which is released on said modulation of permeability, wherein said species produces a detectable signal in the presence of said metabolic signal, and monitoring directly or indirectly for the species,

wherein said cell type of interest is a bacterium.

70. (Previously Presented) The method according to claim 69 wherein said metabolic signal comprises a change in pH.

71. (Previously Presented) The method according to claim 69 wherein said sample is water.

72. (Previously Presented) The method according to claim 69 wherein said sample is a foodstuff.

73. (Previously Presented) A method of detecting a cell type of interest present or potentially present in a sample comprising treating the sample, *in vitro* or *ex vivo*, with lipid vesicle particles which specifically bind to said cell type of interest, said particles having at least one layer of enveloping lipids and incorporating a cytolytic peptide, which is non-covalently attached thereto, wherein the peptide, in response to a predetermined extracellular metabolic signal from the cell type of interest, if present in the sample, interacts with the layer to act as or mediate the opening of pores or channels within the lipid layer to thereby modulate the permeability of the particles, said particles further incorporating a species which is released on said modulation of permeability, wherein said species produces a detectable signal in the presence of said metabolic signal, and monitoring directly or indirectly for the species,

wherein said cell type of interest is a pathogenic cell.

74. (Previously Presented) The method according to claim 73 wherein said metabolic signal comprises a change in pH.

75. (Previously Presented) The method according to claim 73 wherein said sample is water.

76. (Previously Presented) The method according to claim 73 wherein said sample is a foodstuff.